

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of:

Uri L. ZILBERMAN

Confirmation No. 5141

Application No. 10/685,803

Group Art Unit: 3732

Filed: October 16, 2003

Examiner: Matthew M. Nelson

For: **DENTAL CROWNS**

PRE-APPEAL REQUEST FOR REVIEW

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Action mailed December 3, 2009 ("Office Action"), the period for response extending through June 3, 2010 with the concurrently-submitted fee and petition for a three-month extension of time, Appellant requests a pre-appeal brief review of the pending rejections. For at least the reasons discussed below, Appellant respectfully submits that the rejections of claims 1 – 10 should be reversed.

I. The Office Action ignores the fact that the invention is a dental crown readily mountable in a patient's mouth as part of treatment of primary teeth and permanent molars, and the effect of the phrase "consisting of" recited in independent claims 1 and 10.

Independent claim 1 recites in part a dental crown "configured to be readily mountable in a patient's mouth as part of treatment of primary teeth and permanent molars ... consisting of a thermoplastic material layer configured to define a tooth shaped top surface and depending flexible side surfaces" (emphasis added). Independent claim 10 recites in part a dental crown "consisting of a layer of acetal homopolymer resin configured to define a tooth shaped top surface and depending flexible side surfaces" (emphasis added). Unlike the transitional phrase

"comprising," the phrase "consisting of" specifically "excludes any element, step, or ingredient not specified in the claim." MPEP § 2111.03 (emphasis added). In spite of this prohibition, independent claim 1 is rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent No. 5,487,663 ("Wilson") in view of U.S. Patent No. 3,647,498 ("Dougherty"), and claim 10 is rejected as being as allegedly unpatentable over Wilson in view of Dougherty, further in view of U.S. Patent No. 6,186,790 ("Karmaker").

The Office Action indicates on page 2 that Wilson discloses a dental crown "consisting of a thermoplastic layer, but Appellant respectfully disagrees. Wilson requires a composite restorative to form a crown. More specifically, Wilson, in one embodiment, requires a two layer structure (a jacket and a composite restorative) to form a crown, by removing the jacket layer and leaving the composite restorative, thus being not "readily mountable... consisting of..." as per independent claims 1 and 10; and in another embodiment, requires a two layer structure (a jacket and a composite restorative) to form a crown by leaving the jacket in place, thus not being "consisting of ..." as per independent claims 1 and 10. See Wilson Abstract and Wilson col. 4 lines 8-24 and 47-55).

The requirement for a composite restorative material removes Wilson as an applicable reference, since the "consisting of" language recited in claims 1 and 10 specifically excludes any feature not recited in the claims. By requiring a "composite restorative," Wilson fails to teach or suggest each either a dental crown "configured to be readily mountable ... and consisting of ... a thermoplastic material layer" as recited in claim 1 or a dental crown "configured to be readily mounted ... consisting of a layer of acetal homopolymer resin" as recited in claim 10. There is no motivation in Wilson to create a crown without the composite restorative material. None of the other cited references cures this deficiency of Wilson. The other references are cited as allegedly teaching other features of the claimed subject matter,

but not for teaching or suggesting these features of claims 1 and 10. Thus, alone or combined the cited prior art fails to disclose or suggest all the features of claims 1 and 10, and fails to prompt a person of ordinary skill in the relevant field to combine the cited prior art in the manner claimed.

Notwithstanding and in addition to the above, Appellant also disagrees with the statement on page 3 of the Office Action that it would have been obvious to form "an undercut defining an inwardly directed inner surface" as recited in claims 1 and 10 using the embodiment taught in Wilson col. 2, lines 46 – 46. Wilson teaches that this embodiment is made with "stainless steel," Wilson col. 2, line 58 (emphasis added), which is precluded by the "consisting of" language recited in claim 1. Furthermore, in describing the Wilson invention, Wilson teaches at col. 3, lines 2-6 that "it is another objective of the present invention to provide an appliance which is readily bonded to restorative material obviating the need of negative draft or undercut to snap on or engage the tooth preparation" (emphasis added), and further teaches that "[i]n stark contrast to existing crown configurations, it is an important feature of the present invention that the side walls, or walls, 20 are essentially straight." Wilson at col. 3, lines 61 – 65 (emphasis added). This directly contradicts and moreover clearly teaches away the "undercut defining an inwardly directed inner surface" in "the bottom portion of at least one of the flexible side surfaces" of "a thermoplastic material layer" as recited in claim 1 and also similarly recited in claim 10, and is precluded by the "consisting of" transition recited in claim 1, since Wilson's side walls are "for all intents and purposes, parallel." *Id.* (emphasis added). For at least these reasons, Appellant submits that the rejection of claims 1 and 10 under 35 U.S.C. § 103(a) are improper and should be reversed.

Notwithstanding and in addition to the above, Appellant further submits that it is improper to combine Wilson with Dougherty as allegedly teaching a dental crown with "the

color of a vital tooth and being made of a specific thermoplastic material." As acknowledged on page 3 of the Office Action, this feature is not taught or suggested in Wilson. To make up for this deficiency, the Office Action looks to Dougherty as allegedly teaching a thermoplastic material "further comprising pigment or filler," indicating that it would have been obvious to modify the crown of Wilson with the materials taught in Dougherty. Office Action at 3 (emphasis added). This is improper, since such a combination is precluded by the "consisting of" language in claim 1. Reciting "consisting of" excludes "pigment or filler" since neither "pigment" nor "filler" is recited in the claim. For at least this reason, claim 1 is allowable over Wilson in view of Dougherty, and the rejection under 35 U.S.C. § 103(a) should be reversed.

Notwithstanding and in addition to the above, Appellants also submit that it is improper to combine Wilson and Dougherty with Karmaker. As acknowledged on page 3 of the Office Action, Wilson and Dougherty "fail to show the polymer material as claimed." Office Action at 3. To make up for this deficiency, the Office Action cites to Karmaker. Office Action at 4. Specifically, the Office Action indicates that Karmaker teaches a dental crown "formed of a variety of thermoplastic polymer material." Office Action at 4 (emphasis added). The Office Action also characterizes this material as a "polyacetal polymer." Office Action at 4 (emphasis added). Neither characterization, however, is a dental crown "consisting of a layer of acetal homopolymer resin" (emphasis added). Accordingly Karmaker, alone or combined with Wilson and Dougherty, fails to teach or suggest each and every element of independent claim 10. For at least these additional reasons, the rejection of claim 10 is improper and should be reversed.

II. Claims 2 – 9 are also allowable at least for their dependence from independent claims 1 and 10

Appellant further submits that claims 2 – 9 are also allowable at least because they depend from independent claim 1. For at least the above reasons, Appellant submits that the

rejection of claims 2 – 9 under 35 U.S.C. 103(a) should also be reversed.

III. Conclusion

Appellant respectfully submits that independent claims 1 and 10 and all the claims that depend therefrom are allowable. Accordingly, Appellant respectfully requests that the rejections of claims 1 - 10 under 35 U.S.C. §103(a) be reversed.

Should the Panel feel that there are any issues outstanding after consideration of this response, the Panel is invited to contact Appellant's undersigned representative. Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,
THE NATH LAW GROUP

Date: June 3, 2010

/Derek Richmond/

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